

OBJECT RECOGNITION SYSTEM FOR SCREENING DEVICE

Correction List

U.S. Patent Application of:

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Correction List:

1. Claim 6:
 - a. Sub (a): changed "receives" to "receive" to accommodate correction #6 sub (d)
2. Claims 2,3,4,5:
 - a. Claim 2: Cancelled
 - b. Claim 3: Cancelled
 - c. Claim 4: Cancelled
 - d. Claim 5: Changed "The method of claim 1 further comprises ~~other kinds of user interfaces, comprising~~ audio output" to "The method of claim 1 further comprises an audio output comprising a horn or a sound generator"
3. Claims 2, 3, 5, 7, 8:
 - a. Claim 2: Does not apply. Claim cancelled. See correction #2 sub (a).
 - b. Claim 3: Does not apply. Claim cancelled. See correction #2 sub (b).
 - c. Claim 5: Does not apply. Claim corrected. See correction #2 sub (d).
 - d. Claim 7: Changed: "The computer program of claim 6 wherein said program further comprises a remote ~~database~~" to "The computer program of claim 6 wherein said program further comprises a remote and/or shared data of list of objects"
 - e. Claim 8: Cancelled.
4. New abstract submitted.
5. Notified.
6. Claims 1-11:
 - a. Claim 1: Changed "A system and method ~~and computer program that receives data from an image acquisition device comprising a regular x-ray~~ a screening device, tries to recognize each object in said data, and pinpoints each object ~~it~~ is trained to recognize along with ~~its~~ class and hazard level." to "A system and method that receives data from a screening device, tries to recognize all objects in said data, and pinpoints all objects said system and method is trained to recognize along with said object's class and hazard level."
 - b. Claim 1: Doesn't apply. Claim Corrected. See correction #6 sub (a).
 - c. Claim 2, 3, and 4: Don't apply. Claims cancelled.
 - d. Claim 6: Changed "A computer program product ~~having a computer readable medium having computer program logic recorded thereon that:~~" to "A computer program product comprising a computer useable medium having computer program logic recorded on it for enabling a computer system to:"
 - e. Claim 9: Cancelled
 - f. Claim 10: Cancelled
 - g. Claim 11: Cancelled
 - h. Claim 2, 3, 4, 5: Cancelled. See correction #2.
 - i. Claim 7: Changed. See correction #3 sub (d).
7. Notified.
8. Claim 9: Cancelled. See correction #6 sub (e).
9. Claim 9: Cancelled. See correction #6 sub (e).

10. Claims 1, 6, 7:

- a. Hiraoglu (U.S Patent 6,185,272) discloses a system equipped with a CT scanner to recognize items, while the present invention discloses a system to **enhance/upgrade regular** screening devices with **pattern and/or object recognition capabilities**. Building a new x-ray screening device costs a lot more than enhancing/upgrading a regular screening device.

11. Prior art (1-4):

- a. Changed paragraph 3, Background of Invention from: ~~“Upgrading the screener device may increase the overall performance. However, it is an expensive solution and does not guarantee that personnel with inadequate training or poor mental condition can do the task well enough”~~ to “Different X-ray systems have been proposed. For example, U.S. Pat. No. 5,319,547 and U.S. Pat. No. 5,838,758, issued to Krug et al, describe an X-ray line scanner for automatically scanning luggage, U.S. Pat. No. 5,367,552, issued to Peschmann, and U.S. Pat. No. 6,185,272, issued to Hiraoglu, describe a CT scanner for automatically scanning luggage. Additionally, manual (human-operated) screening devices have been around for many years.”
- b. Added a new paragraph after paragraph 3: “While all of these devices are designed to automatically detect explosives, they are stand-alone devices that cost a lot of money and may not be as reliable as they should be. Therefore, it is virtually impossible to replace all regular screening devices with their automatic counterparts.”
- c. Changed paragraph 4 from: ~~“Although in near future nothing can substitute a state of the art screening device with a well-trained personnel in his or her tip-top shape, this system could potentially compensate some error made by less qualified device or personnel. To begin with, this system can be trained to recognize and mark potentially hazardous objects for further, more careful examination by the operator of the screening device. Moreover, the system can be interfaced with any TWAIN-compliant device. This means that with a suitable adaptor and driver, the system can be interfaced with the screening devices already being used”~~ to “The object of the present invention is to enhance regular screening devices with object recognition capabilities. To minimize the cost of such enhancement, the system uses TWAIN, a widely accepted data acquisition protocol. As a result, the enhancement can be accomplished with commercially available computer systems such as PC (personal computer with AMD or Intel-based microprocessor) and/or Mac.”
- d. In plain English, all the patents issued so far are for new, stand-alone, expensive automatic screening devices while the present invention is an **inexpensive enhancement** for the **existing** screening devices. It doesn't automatically single out suspicious luggage, but it marks all suspicious items in the luggage being examined by the screening device's operator so that the operator can take a look at them more carefully.

12. Notified.

13. Claim 11: Cancelled See correction #6 sub (g).

14. Claim 10: Cancelled See correction #6 sub (f).
15. Claim 10: Cancelled See correction #6 sub (f).
16. Notified.